MSFC ISO REGISTRATION AUDIT SCRIBE NOTES - Feb 98'

THIS AUDITOR'S MAIN FOCUS WAS ON ISO ELEMENTS: *

8 - PRODUCT IDENTIFICATION AND TRACEABILITY
9 - PROCESS CONTROL
10 - INSPECTION AND TESTING
11 - INSPECTION, MEASURING & TEST EQUIPMENT
12 - INSPECTION AND TEST STATUS
15 - HANDLING, STROAGE, PACKAGING, PRESERVATION AND DELIVERY

* Other generic issues were discussed as appropriate during the audit, (i.e., Quality Policy, Management Representative, etc.)

Date: Feb. 26 - 28, 1998
Auditor: Auditor #3 (N)
????? - sanitized , replaced an individual's name

ISO Elements: 10, 11, & 15
CR30, Bldg. 4705:

Note: *Auditor Reviewed Inspection & Action Report (IAR) from previous day's audit.*

N: How do you get Program Critical Hardware (PCH) Handling Procedures?

A: They are provided by the applicable Quality Assurance Specialist (QAS).

Note: *The Auditor reviewed PCH Handling Procedure for completeness/accuracy.*

Note: *The Auditor noticed some equipment which must be calibrated periodically in a cabinet.*

N: How do you track calibration schedules for this equipment?

A: I maintain a computer data base.

N: What type data do you enter into this data base?

A: All applicable data (e.g., NEMS number, Manufacturer, Nomenclature, etc.)

N: Do you have a copy of the latest list?

A: Yes. There are 217 items on it. (Auditee showed/explained list).

N: In this facility, how are items identified as PCH?

A: Almost all items received here is PCH, with a couple of exceptions.

N: What do you do relative to inspection of PCH?

A: Inspection depends on terms of the quality receiving requirements.

N: Do move procedures accompany PCH?

A: Yes.

N: Does anything come in that is identified as PCH, but is not?

A: Not to my knowledge.

N: Do you receive and PCH not requiring inspection procedure, even if

        handcarried in?

A: No. Regardless of how received, we still require inspection procedure.

N: What triggers PCH process?

A: Applicable Program Office notifies us of requirement with description of PCH. CN sets up to receive PCH. Quality, Safety, & Facilities offices get involved.

N: Is there a procedure relative to handling of PCH?

A: Yes. It requires many sign-offs. (Auditee shows/explains sample procedure).

N: Who can handle PCH?

A: Handlers require training. They are briefed on guidelines and shown a video. Equipment operators are certified through the union. It's really a 4-year training program.

N: Do training records exist?

A: Yes. Safety Office certifies the operator.

N: What is your role in the PCH handling procedure/process?

A: I coordinate with all elements (Qual, Safety, etc.).

Note: *Auditor reviews a procedure for an active PCH shipment.*

N: What part of this procedure was done this morning?

A: Verification of the overhead crane and forklift.

N: Is MSFC-STD-126E referenced in your documents?

A: Yes, in our OWI and in the handling procedure.

N: When is OWI for lifting equipment used?

A: Always. MSFC-STD-126E does not cover forklifts, jacks, etc., so we put those requirements in our OWI.

N: Are these referenced documents available?

A: Yes. Most are in the Repository.

Note: *Auditor reviewed PCH handling procedures from previous day's audit and from this morning's audit session.*

N: Where is the requirement for the Operating Hazard Analysis stated?

A: In CWI.

CN41, Bldg. 4471

N: What types of emergency storage items would you typically have?

A: Test stands, valves, gauges, etc.

N: Do you deal with spare parts?

A: Yes.

N: Do you store flight parts?

A: Yes.

N: How do you keep track of your inventory?

A: All inventory is tracked in MSMS or NMS.

N: Who maintains that data base?

A: Property Management Division.

N: Who are the users of the data base?

A: Our Contractor, SCSC.

N: Do you audit inventories?

A: Yes. We conduct a wall-to-wall every 5 yrs. Controlled and/or sensitive equipment is inventoried bi-annually.

N: Is there an MSP governing your activity?

A: We use OWIs and SOPs, which we surveil.

N: What exactly is MSFC's role in contractor performance?

A: Oversight/Surveillance.

N: Do you have several buildings where hardware is stored?

A: Yes. Primarily, we use two to store program stock.

N: Where are surveillance records kept?

A: In this building. I'll show you some.

Note: *A copy of a Surveillance Plan was shown to the Auditor.*

N: Explain this plan.

A: The auditee went through OWI CN41-001 to the Auditor's satisfaction.

N: Do you maintain a schedule for surveillance reports?

A: Yes. Reports are due quarterly.

N: When was the last one done?

A: In December 1997.

N: Where is the nearest storage facility for flight hardware?

A: Bldg. 4723; just down the street.

N: How do you make sure all storage buildings are covered in surveillance?

A: All items, including location, inventory dates, etc., are covered in our
       data base.

N: How are the items listed in the data base?

A: Complete location including building, row, bin number.

N: Can you show me a sample data base which shows the location and the
       nomenclature of flight hardware stored here?

A: Yes. Sample data base was explained to the Auditor's satisfaction.

N: What happens if there is a discrepancy found during contract surveillance?

A: The inspector documents recommended corrective action.

N: If a discrepancy is noted, what is the process?

A: Discrepancies are reported/tracked through the Procurement Discrepancy
       Tracking System (PDTS).

N: Who notifies the vendor of any surveillance discrepancies?

A: Another lady in CN21. She provides it to the COTR.

N: Do you know the Quality Policy?

A: Yes. To provide quality products and services to our customers.

N: What does that mean to you in your job?

A: It applies to all facets of my job.

CN71, Bldg. 4471:

N: What do you do?

A: I'm responsible for all commercial transportation.

N: How do you choose carriers?

A: We have a list, plus GSA provides us with a list of qualified carriers.

N: How do you typically receive notice to ship?

A: We receive a signed-off Shipping Request.

N: Are items actually shipped out of this building?

A: Yes.

N: Is the Shipping Request specified in any procedures?

A: Yes. *Auditee provided copy of CWI 15.1.C04 to the Auditor.*

N: Is packaging done by MSFC or contractor personnel?

A: Various contractors.

N: Do you have procedures to monitor carriers?

A: No.

N: How do you document complaints about carriers?

A: Normally, complaints or comments are included in the "back-up" data
        which is attached to the shipping records.

N: Do you maintain folders for carriers.

A: Yes. Auditee showed folders for two different commercial carriers.

N: If you were out of the office, would others know those carriers that were
        not acceptable?

A: Yes. That's the purpose of the carrier folders. Everyone knows to check
        them first.

ISO Element(s): 4.8,10,12

Auditee Organization Code: CR30   Building: 4705

N: What work is done here?

A: Receiving inspections, quality testing, and final assembly. Do final close-out on work orders
for major assemblies.

 N: In what format is request made?

A: Letter, or some other format, such as the Quality Plan.

N: What criteria is used for inspection?

A: Drawing, or other standard as requested.

N: What document governs inspection instructions?

A: S&MA-CR01-QA-Y-006, Preparation of Inspection Instructions.

N: What is your title (to three people)?

A: Quality Assurance Engineer, QAR, Quality Information Systems Analyst (respectively).

N: What do you do?

A: Take care of quality records, procedures; they are filed by project. We buy-off on the test, & bring the as-run copies here.

N: What is the Quality Policy?

A: To provide quality products & services to our customers.

N: How does that apply to your job?

A: I try to make sure that information is correct. If I find a problem with parts tags, I make it known.

N: Do you work with contractors?

A: Yes.

N: Do you control contractors' quality stamps?

A: No, just civil service.

N: Auditor looked at a part tag quality stamp & asked if they could prove whose stamp it was.

A: Pulled out "MSFC Quality Status Stamp Accountability," which seemed to satisfy the auditor (i.e., the stamp verification checked out).

N: How often do you verify the stamps?

A: We do an annual audit of stamps.

N: Looked at MSFC-P12.1, Rev. A (no question was asked).

A: N/A.

N: Verified another quality stamp of a person in the room, by looking on above form (MSFC Quality Status Stamp Accountability).

A: N/A.

N: How do the inspection instructions work?

A: The customer transmits the receiving instructions to us.

N: Where do items come in for receiving?

A: We all walked to the receiving area. Property Management people send them an e-mail saying it's coming.

N: At that point, would you know the inspection instructions?

A: We may. Normally the procurement paperwork would address that.

N: Do you buy-off items from manufacturing?

A: Don't typically buy items from the manufacturing area anymore. Can do it if specifically requested.

N: Do you have something that has been received?

A: Yes, this has not been opened yet.

N: What does Receiving do?

A: They check to see if the right part number was included.

N: What percentage of items come in without requirements?

A: A low percentage. We are converting over to an on-line system.

N: What procedure governs inspection requirements?

A: S&MA-CR30-QA-Y-001.

N: Where are requirements found?

A: Would either be a letter or Quality Procurement Requirements form.

N: How are discrepancies tracked?

A: Looked at the on-line Procurement Discrepancy System. Looked at a discrepancy which had been recently closed.

N: Is Procurement tied into this system? How do they know that it's OK to pay the vendor?

A: Yes. I think Financial Management is tied in to the system as well.

N: Is the electronic system addressed in the governing work instruction?

A: Yes.

N: Who assigns the serial numbers, the vendors?

A: Right.

N: Does the data package received from the vendor address inspection requirements?

A: The auditor withdrew the question, then asked the next one.

N: Where does it show who does the receipt inspection?

A: They showed him the IAR (electronic), in the diary, where it showed the inspector's user I.D.

N   NQA Auditor

A   Auditee

ISO Elements: 8, 9, 10, 12

Location: Bldg. 4705 A: CR30

Follow-up from AM audit concerning I&AR-009 Part Numbers.

N   How did shipment come in?

A   On packing list. Partial shipment.

N   Are the parts the same?

A   Yes, per phone conversation with vendor, the P/N suffix changed during order.

N   How was this purchased?

A   PO H28228D (?)

N   What do you do to verify that it's acceptable?

A   Look at Quality requirements, test requirements, drawing, or serial number.

N   What happens when you detect a nonconformance?

A   Model numbers didn't match. Notified technical contact. We called vendor and
         determined that the parts were the same.

N   It looks like it should have been evaluated on a nonconformance. How do you do that?

A   We reject part on I&AR.

N   How can you show me that the parts are the same? You resolved it verbally with the
         vendor.

A   We have nothing written from the Technical contact.

N   What procedure tells you how to reject a part?

A   S&MA-CR30-QA-Y-001

N   Looking at 4.3f in procedure.

N   Vendor is partially to blame. Minor issue, your procedure calls for you to document.

A   We need to get a letter for the file to show that P/N change is acceptable.

N   You noted change, contacted engineer, and contacted the vendor. You need a paper trail to shoe that this is the equivalent part.

A   We need to file with the PO a letter from the engineer stating the change is ok.

N   Is there a staging area for incoming parts other than that table?

A   A flowbench for electronic parts (ESD).

N   What are these packages sitting in the area?

A   Just received. Waiting on acceptance requirements.

A   These are dead projects that we already own the parts. They have no priority for processing.

N   What if it's not all here?

A   We reject it.

N   Show me how you reject a part.

A   I&AR form on computer. Walk through steps to reject.

N   Looks like a good system.

N   Were you trained for this system.

A   Yes.

N   Just the "Minor" on how the discrepancy was documented.

Location: Bldg. 4707   A: EH33 / EH35

Composites lab / Productivity Enhancement

X-33 LOX tank Fabrication

N   What are you doing on this program now?

A   The tank is supplied by our customer. These are our procedures.

N   Where do you get requirements?

A   Lockheed Martin (looking into documents)

N   Do you have a programmer (for machine operations).

A   Thiokol contract for programmer with the machine manufacturer.

N   What is NASA's role?

A   We have buy-off and inspection points.

N   What about your customer?

A   They also are involved and have buy-offs.

N   Is this (tank) customer supplied product (CSP).

A   Yes, but it hasn't been turned over to us yet. We haven't signed for it. We will verify

         requirements when we accept the CSP.

N   What's the next step?

A   It's turned over to us. We go to shop traveler to follow the buy-offs we're responsible

         for. We conduct a peer review before we return it to our customer.

N   What is the peer review?

A   Internal tiger team type review. Self-assessment. This is our internal requirement.

N   Who has drawing requirements?

A   Lockheed Martin.

N   Is NASA quality involved?

A   Yes. Quality agrees to buy-offs beforehand , so they know what they have to buy into.

N   What kind of customer agreement do you have?

A   Task agreement (with Project) or NRA.

N   How do you document a nonconformance.

A   Form 460 (points to in notebook).

N   Who ultimately has responsibility for nonconformances.

         If the peer review is important, document it (in procedures).

         If it's in your facility, you own it.

A   Contractor is building it here.

N   I missed that point earlier.

N   This is a project we will be following in future visits. When it has time to mature

Location: Bldg. 4708   A: EL62

Solar X-ray Imager

N   When was this test run?

A   Completed test last week in Bldg. 4718.

N   What caused retest?

A   Request from scientist to perform retest due to additional study of data. DR opened for work to be done.

N   What documents prior to this retest?

A   Documentation closed out and accepted by the vendor.

N   (did not hear question)

A   DR. Instrumentation not performing as expected.

N   (did not hear question)

A   Test requirements developed with scientists. SOP used to accept equipment back into lab.

N   What is state of hardware now?

A   Being packaged for return to vendor.

N   What does worker use to reinstall parts.

A   TPS used to remove and reinstall parts.

N   Where do torque requirements come from?

A   Assembly requirements. Drawings.

N   What happens if you have faulty equipment?

A   We had some problems on this test and it is documented in the back of notebook on a form 460. A cable was broken. Test discrepancy report.

N   Do you keep a log?

A   Yes, next page.

N   Is there a log for DR's

A   (did not hear answer)

N   What's this I&AR?

A   It's how we accept hardware.

N   Is there a functional test before shipment?

A   Yes, per the DR.

N   What tells you to do the functional test?

A   Requirements come through Project Retest Plan.

N   Noted procedure with 1997 date error (instead of 1998).

N   How does it ship out?

A   Form 55.

N   Where do inspection requirements come from?

A   TPS.

N   What dimensions do you measure to?

A   The drawing.

N   You did a good job documenting. No issue in this area.

Location: Bldg. 4619 (170A)   A: ED73

N   This room is warm. Is there a temperature requirement for the test equipment.

A   The customer can specify temperature.

N   What is your last test run.

A   Hands copy of last test report.

N   What is report number?

A   Memo or TCP number. We track it both ways.

N   Does table 1 list all equipment used in this test?

A   Yes.

N   What happens if you can't meet test requirements?

A   During checkouts, if a problem is detected, the requester is contacted. A waive must be written if we are to continue.

N   Is there a file for these waivers?

A   It's in this document. Copy of the as run procedure.

N   Where is waiver?

A   Requester writes request for what we can meet.

N   Need to see actual waiver or request from customer.

A   Need to see ... in EL62.

N   Need to see how customer agrees to changes.

Will follow up on in the morning.

Element: 11

N: Are electrical and mechanical calibrations done in 4650?

A: Yes

N: Do you keep calibration records for accelerometers?

A: Yes

Walked to the dimensional lab.

N: What is the standard used for depth micrometers?

A: We use depth blocks. The standard is NAVIR 17-20MD-08. A cross reference log is kept across from "the computer" (the auditee indicated a different room). There is a master list of procedures.

N: Are there records for the last calibration date in the database?

A: Yes

N: What is your procedure for calibrating protractors?

A: T.O. 33K6-4-1597-1

N: What is the standard for calibration?

A: Angle blocks are used.

N: Where are the calibration records for angle blocks kept?

A: Up front.

N: How do you prioritize your work?

A: The Metrology control document is used to prioritize or by verbal request.

N: Do you keep a recall list?

A: The March list is ready.

N: The February letter went out?

A: The receipts have come back.

N: Is the actual list available?

A: The list is not required. Receipts are required to come back.

N: Were the February calibrations accomplished?

A: I'm not the policeman, but I do get the receipts back.

N: What happens if equipment is out of tolerance.

A: A disposition tag is sent and an e-mail to notify the using organization that equipment is out of tolerance. The MSFC P11.1 was quoted, paragraph 6.1.4.

N: Where is the procedure for a recall report?

A: MSFC P11.1 was quoted, including requirements for recall reports, receipts, repair and calibrate, etc.

N: Are you able to recreate the February recall report?

A: Not sure.

N: Do you have a tracking system for the disposition tags?

A: Yes, paragraph 6.1.7. The tracking record tells how equipment was used in case equipment is out of calibration.

N: Who tracks to see that evaluations are done for out of cal equipment.
A: That is the user organizations responsibility.

N: Is the disposition tag a quality record.
A: Yes, the user organization maintains for 1 year.

N: Is there a log of disposition tags maintained?
A: An e-mail is sent as secondary verification.

N: How would an internal auditor be able to track all disposition tags you send out and their evaluations?
A: A copy of the e-mail is kept, but the e-mail is not required by the procedure.

N: Do users know what to do if they receive a disposition tag?
A: Cal contacts have been trained - about 229 attended the training.

N: I would like to see records for the depth micrometer and angle block.

Walked to receiving area.

A: A copy of the March recall report was given to the auditor.

N: Could you pull up the cal record for XYZ.
A: Pulled up record.

N: What standard is used to calibrate?

A: No reply.

N: Pull up 624659.

A: Pulled up on computer.

N: Who calibrated this?

A: The Army did last time. It's currently at the Army, were waiting for it to come back.

N: Is a slip attached to the equipment sent out?

A: An example of the slip was given to the auditor.

N: Do you calibrate contractor equipment?

A: Yes

N: Look at C09620

A: Pulled up on computer screen.

N: What standard is used to calibrate?

A: Pointed at screen.

N: That's not the same number the technician answered to me.

A: The Army's numbers are different.

N: Pull up 0624643

A: Pulled it up.

N: Do your records tell what procedures are used for MSFC calibrations?

A: No, not if its an Air Force procedure. That was done before they were entered into our computer database.

N: Show me an example of how it's done now.
A: Provide example (auditor was satisfied).

N: I want to see the cross reference log.
A: It's next door in 129.

N: Is this room controlled environmentally?
A: No, it's not required to be.

N: Are the items here due for calibration?
A: Yes.

N: Where are the outgoing items.
A: Took auditor to the outgoing area.

N: Does this hallway get real hot, to where it might effect calibrations?
A: No. Equipment is delivered by truck. The precision stuff is handled more carefully.

N: What is this log (found on a shelf in the outgoing hallway).
A: That is the pickup and delivery log. It shows which equipment has a disposition notice, but is filled out by the delivery person and is not required by procedure.

Discussed that the e-mail is probably a better documentation of equipment that was given a disposition tag.

Conversation switched to the portable 1000 lb scale found with calibration due in Aug 1995. Only known use was for employee weighing.

N: What category is the scale?

A: It's not on anyone's list so it's automatically category 3, meaning not used for critical measurements. The person who was responsible for it has left MSFC.

N: If equipment calibration is due, what happens to equipment?

A: If a calibration sticker expires, it goes to an inactive mode.

N: Does your procedure require that all equipment is assigned to someone?

A: No only Category 1, 2, 4, and 5 should be on someone's list. Non-critical measurements (cat 3) do not have to be on anyone's list.

N: Is the scale on EH51's list?

A: I will have to check.

ISO Elements: 10, 15, 11

Auditee Organization Code: ED73

Building: 4619

N: Are you running any test?

A: Have plans to be running one in a little while.

N: I'm interested in the test you are about to run. What system will you be utilizing.

A: This test equipment. (pointing to equipment)

N: What procedures are you using for the test you are about to run?

A: This TCP. Test and Checkout Procedure

N: Who approves test procedures prior to running the test

A: Customer has procedure. We will use that procedure with our OWI. (showing test procedure) here is the customers procedure

N: Who is the customer?

A: Boeing.

N: Discussion on Boeing. General conversation of interface and different Boeing facilities.

A: We run procedure according to customer procedures. Customer dictates to us how to run the test.

N: Will this test be ran here. On this shaking table.

A: Yes

N: How do you know if test meets the requirements or passes the test?

A: It is dictated through the test. We follow the procedure.

N: What about torque, Explain the process for performing test.

A: Unless the customer specify we torque to our procedure.

N: Is it a part of data package.

A: Yes.

N: Show me procedure

A: (Show procedure, T&C Procedure 2/24/98)

N: What about torque?

A: We would identify what we torque too.

N: Do you record torque wrench?

A: Yes. (Shows Auditor what is recorded)

N: Is this preliminary? How does it link to the testing?

A: This is the test report.

N: Is this ever typed?

A: No. It's hand written.

N: I'm concerned that the pages aren't numbered.

A: This is a "running" test. Let me get an earlier version. (Shows a copy of pre-ISO test.)

N: Is there a procedure for preparing a TCP? How is it documented?

A: Yes. (Shows the auditor a copy of procedure/documentation)

N: Does it address utilizing customer procedures.

A: That's how we get our test requirements.

N: Is there a procedure that states where you get the requirements.

A: (TL) It does require that we get that requirement from the customer. (looking for OWI that specifies this requirement.

N: Do you reference customer requirements? (looking at T&C Procedure "test" example) This is what I'm looking for. So, is there a place in your procedure that talks about generating TCP and reference customer test requirements. (looking at OWI-ED71-003) What is a post-test verification.

A: (Show a post-test verification.)

N: Where is the TCP log book kept?

A: In the branch office.

N: This is signed after test is completed?

A: yes

N: Within that report there is a test equipment list, is this in the procedure OWI-ED71-003.

A: Yes, (shows the OWI-ED73-P16.1-002)

N: (looking at test equipment list) What happens if there is a test failure?

A: Hardly happens…

N: What if the equipment doesn't meet or fulfill the request?

A: We make a note on TCP or fill out a TPD. I got one on my desk. I will go get one. (Present TPD "Test Procedure Deviation") We put page # of problem on TPD and make it a part of the report.

N: If it damages hardware how do you handle it. Do you still do DR?

A: No. Quality would do it and we would have input.

N: Where do you file TPD?

A: (TL) Appendix D in OWI.

N: (looking at appendix "procedure Deviation") OWI-ED71-003 Are there any DR since ISO?

A: No. We usually run checkouts and tell people that hardware did not meet the test. And we usually don't do a test if we feel the hardware won't meet the test. We have a test coming this summer about 20000 lbs.

N: Do you always get a spec from the client?

A: Yes. We always get specs. We won't run a test until we get specs.

N: Do you have a Deviation Log?

A: No. We have not had to do any deviations yet.

N: OWI says Deviation log shall be maintained by the test engineer. Do you know what that log book will look like.

A: Test engineer will need to prepare it when it happens.

N: You have a copy of recent test procedures?

A: In the branch office

N: Are they filed as an official copy. Are they kept here or in the branch office?

A: Branch. All filed are for reference copy.

N: Who coordinates test?

A: I do.

N: Where do you find the latest revision of the procedure?

A: It's electronic. I can show you. Let's go to my office. (Walk over to auditee's office)

N: (Looking at OWI)   You guys keep calibrations records here?

A: yes. We share with Vibration East.

N: Who maintains records of standards?

A: Vibration East maintains there records.

N: Where do you calibrate accelerometers? What procedure do you use?

A: We have a calibration procedure. (bringing up OWI ED-71-003)

(Go back to vibration area)

N: I see you do calibration. Is this calibration done once a year?

A: We do test once a year.

N: Show me in TCP the calibration section. It says you have a calibration log. Where?

A: Show calibration log.

N: Who maintains?

A: I do. I maintain a log of all the equipment. Accelerometers, etc.

N: This is what you do every year? (looking at log)

A: Yes.

N: Who calibrates the standards?

A: The cal lab calibrates the standards and I calibrate the others.

N: When do you calibrate.

A: Here are the dates (noted in the standard)

N: So the Cal lab should have the calibrated standard noted in its record to show that it has been or when it is to be calibrated?

A: Yes

N: Are you self maintaining this record or is it on their recall list?

A: It should be on their recall list. However, we maintain a list also. It is up to us to check the standard.

N: Can you show me where you keep Cal record to show you are up to the standard?

A: I can show you that.

N: Besides the accelerometer, do you cal any other software validation? I read that somewhere.

A: (Shows auditor accelerometer records)

N: How do you pretest /check standards?

A: Place acceleration on shaker.

N: Where are the Procedures?

A: FOP EP73-VIB-FOP-003

N: (Looking at calibration & software verification OWI-ED73-FOP-006.) Which is the record?

A: We keep record on tape

N: What is the acceptance criteria?

A: Must meet 5% of yearly cal.

N: So you look at record and frequency?

A: (Shows example of tape log with record)

N: (Reviews copy of acceleration Calibration record) Who performs software verification?

A: He and I perform the test.

N: Where is the procedure of Software verification?

A: OWI-ED-P16-001

N: Is this considered purchase or in-house software?

A: Purchased

N: Where do you keep data of where it's calibration is done?

A: Attached to the back of the FOP

N: This was done on what system? (looking at system)

A: (points to system)

N: Where is the calibration sticker?

A: (Org Rep) We don't use that system. We use our own. It's not a requirement to use stickers.

N: No. It is a requirement of the ISO standard.

A: (Org Rep) No. Everything we cal ourselves, we record. It is a quality record.

N: Is this system recorded as a calibration by "Name"?

A: (Org Rep) Yes. (Show auditor record) It is category 5. This is what we calibrate ourselves.

N: Does this include what cal lab has calibrated?

A: Yes. So you are saying it should have a sticker?

N: Element 4.11 it is a standard to tag software to signify that this equipment has been calibrated.

A: (Org Rep) MSP-11.1 says that category 1-2 shall be tested by cal lab. Category 4-5 in MSP states that the equipment calibrated by yourself does not have to be directly tagged. It's up to the organization.

N: (looking at the MSP) My question is, is this software in the proper category? This says calibration of mandatory items should be in category 1 and calibration of equipment periodically used should be in category 5.

A: (Org Rep) No. It's category 5.

N: That category says calibrate before each use. Do you calibrate per use.

A: (Org Rep) No. We use it periodically and we set our standard for calibrating each year.

N: My concern is with this category. Should this be category 5?

A: Prior to us using this software, we have a change every year or and upgrade in software/hardware. We calibrate it each year before we use the new software/hardware.

N: The way the procedure is written it is only those items covered by the calibration lab.

A: You will be happy if we put a sticker on it?

N: I'm not going to tell you what to do. It's not a problem now. Since you have it all recorded. It's easy to put a sticker on it. How you are doing it now, you are covering the minimum requirement.

A: The control list will tell you when the equipment was calibrated.

N: You are not violating your procedure. But be aware of how you place these items in the categories.

A: (Org Rep goes into a deep conversation about the category debate)

N: I'm not going to debate the listing. The way you are doing it covers what you need. I want to commend you guys on a good job. I believe we found a couple of things last time, but you guys are covering those. I'm really pleased with your work. "Name" you are doing a great job with the log. (moving to another employee) You have been quiet. What is the Marshall Quality Policy?

A: Well in our case, To provide quality services to our customer.

N: And what does that mean to you?

A: It means that I will do my best to provide a good service to whomever need or duty I am to perform.

Elements: 15

Building: 4471

Organization: CN71

N: I was reading a procedure earlier…

A: MSP15.1 or CWI-P15.1-C01.   (CWI is what he was talking about)

N: Reviewing CWI, what do you do?

A: I work with PCH. Definition is for critical hardware. Ensuring proper handling. Defines hardware & requirements and handling procedures. If in Lab perimeter, Lab can hand deliver. If over 10000 lbs. Lab gets involved as well as security, escorts, local law enforcement (if needed).

N: Who identifies hardware as program critical?

A: MLR.

N: What is program critical?

A: Spelled out in the CWI.   (shows place)

N: Does the vendor spell out what type of inspection is needed?

A: I program until MLR responses?

N: How do they (receiving) know it's PCH?

A: It's marked by the vendor. Critical item label is placed on item.

N: Who places requirements on the sub-vendor?

A: Program/Project engineer ensure that vendor is aware that the project is program critical.

N: What instructions are given to identify P.C?

A: The SOP identifies it.

N: In procedure, you talk about a log. (looking at CWI) where is this list/log?

A: This is a new procedure, other than this, we have no example yet. I can show you example of list of space station project list coming from 4619 to 4755.

N: It says the you have MLR reviews. Do you have?

A: Yeah. When updated, they will let us know.

N: Are the handling procedures identified?

A: 3 types, listed in the CWI. (looking in CWI)

N: Where are records kept?

A: In CR30 by Quality.

N: You have any examples of the Generic or Formal?

A: This is a present redline of the formal.

N: The definition of a formal. Is this a draft?

A: Yeah. As part of the process, the Engineer prepares a draft. Draft is received by S&MA Engineer and final questions are inputted and then it goes through the appropriate signatures.

N: What is being done as actually operations in this process you were talking about us visiting.

A: Section 3.4 covers what we will be doing today.

N: Is there an approved version of this draft document.

A: Yes, it's at the building. 4755.

N: What is this annual list?

A: We don't have a complete list of the MLRs.

N: Do you have a list for the item you were talking about?

A: No. This is a returned item. Space station is typically the only group that have a list. I have a list for X-33 which I will receive this summer.

N: It looks like for this document, here is a final list that can't be changed?

A: Typically, or MLR which is associated with the program would let us know if there is a change in the schedule then it would affect the PCH.

N: How many programs/items are listed on PCH?

A: We are working on Space Station & X-33. We could get a project later. We have 2 programs on chart that have active PCH. This and X-33.

N: Where is the X-33 list?

A: Presently, (showing tank test plan). This project has been ruled out of scope for the audit.

N: What do you mean out-of-scope? If it is brought back here to do work on, why is it ruled out of scope?

A: Don't know. It is a return. (Looking at a document to see what it is and why it would be out-of-scope.)

N: Doesn't your document say something about return?

A: Yeah, return from space which is on PCH Definition. Although it is considered out-of-scope, we handle it with the ISO process. That's why we were interested in showing it to you. So you could see how we handle the process.

N: Can I get a copy of this letter that states that it is out-of-scope. How do you know who handles the TPA.

A: Project manager.

N: Who keeps the final version of the move?

A: It is keep by quality.

N: Where would I go If I wanted to get a copy of the procedure?

A: You would need to go to quality or to the station that hold it. 4705

N: What about hand handling procedures?

A: There are no handling procedures.

N: Is there anything that require TPS?

A: Not that I'm aware of. This hardware is not here.   They are preparing for this hardware to come.

N: In procedure it talks about inspection?

A: Safety & facilities office are there when the operations happen.

N: Procedure talks about how to do it. Is it done in conjunction with the procedure.

A: Yes. It is specifically call out in spec.

N: (Reviewing spec/ Reviewing CWI "Lifting Equipment & Operations")

A: Standards and specs are called out in CWI.

N: Can I get an example of what you were talking about, procedure.

A: (Escort) That's all happening in 4705—we can track that process. You want to go this afternoon.

N: Yeah. But I need to mention to Lead Auditor the concern that if this is an out-of-scope project than we may not need to pursue it.